

REMARKS

Reconsideration of the application is requested.

With regard to the telephone interview that occurred on May 15, 2008, applicants affirm the substance of that interview as described in the Interview Summary that was mailed on May 21, 2008.

Claims 11-18 and 22 are now in the application. Claims 11-18 and 22 are subject to examination. Claim 11 has been amended and claim 22 has been added.

Under the heading "Claim Rejections – 35 USC § 103" on page 4 of the above-identified Office Action, claims 11-18 have been rejected as being obvious over U.S. Patent No. 6,609,419 B1 to Bankart et al. in view of U.S. Patent No. 6,591,671 B2 to Brown under 35 U.S.C. § 103. Applicants respectfully traverse.

Referring to Fig. 6 and to column 12, lines 22-62 of Bankart et al., it is seen that a wheel antenna 2 is mounted on the inner rim 26 of a vehicle wheel 20 and a fixed antenna 3 is mounted on a mounting bracket 40 located near the vehicle wheel 20. The wheel antenna 2 and the fixed antenna 3 are separated by an air gap and they are capacitively coupled. The sensor module 1 is connected to the wheel antenna 2 via a wire 36, and the wheel antenna 2 capacitively couples the signal from the sensor module 1 to the fixed antenna 3. The fixed

antenna 3 then feeds the capacitively coupled signal to the relay module 4. The relay module 4 is preferably configured integral with the fixed antenna 3, but may alternatively be connected to the fixed antenna 3 by a cable (see column 13, lines 1-6).

Claim 11, among others, includes the following limitations:

a plurality of transmitters each having at least one transmitter coupling element emitting primarily an electric near field;

an infrastructure body having an electrically conducting conductor element electrically insulated from ground, said conductor element coupling in the electric field emitted by said transmitter coupling element; and

a central receiver having a receiver coupling element coupling out the electric field from said conductor element.

Let us be clear about what is being defined in the copied portions of claim 11.

A transmitter coupling element emits primarily an electric near field, an electrically conducting conductor element couples in the electric field emitted by said transmitter coupling element, and a receiver coupling element couples out the electric field from said conductor element. This concept is shown in Fig. 1, for example.

In the "Response to Arguments" section of the Office action, the Examiner has stated, "Applicant also argues that Bankart et al. teach the electric field is

directly coupled between the wheel antenna 2 and the fixed antenna 3.

However, Bankart et al. teach the use of conducting plate antenna separated by an air gap. The electric potential on one plate produces a localized electric field that induces a potential on the other (column 7, lines 30-46). The plates themselves can be protected by being covered by an insulating material, read as the body of the vehicle, which is of metal and is electrically conducting.”

Applicant is not sure what the Examiner is trying to say here and would appreciate clarification. Applicants interpret the statement made by the Examiner as meaning that the Examiner is interpreting the plates, which form the wheel antenna 2 and the fixed antenna 3, as being part of the infrastructure body. If that is in fact the case, the teaching still does not show the invention as defined by claim 11. If the wheel antenna 2 and the fixed antenna 3 are interpreted as being part of the infrastructure body, then there is no structure that could be compared with the transmitter coupling element and the receiver coupling element that are each defined in claim 11.

Alternatively, if the wheel antenna 2 is compared with the claimed transmitter coupling element and the fixed antenna 3 is compared with the claimed receiver coupling element, then there is no structure that could be compared with the claimed electrically conducting conductor element of the infrastructure body. Applicants note that the air between the wheel antenna 2 and the fixed antenna 3 cannot be compared with the claimed electrically conducting conductor element of the infrastructure body. Therefore, even if there were a

suggestion to modify the teaching in Bankart et al. by providing a plurality of transmitters as the Examiner has alleged is suggested by Brown, the invention as defined by claim 11 would not have been obtained.

Claim 11 has been amended to even further distinguish the invention from the prior art. Claim 11 now includes the limitation: wherein said transmitter coupling element does not contact said conductor element. Support for the change can be found by referring to the translated specification at page 7, lines 4-10, for example, which explains that there is a gap between the coupling element and the conductor element. The amendment to claim 11 eliminates the possibility that the Examiner could attempt to read the wheel bearing and the supporting structure contacting the wheel bearing of Bankart et al. on the claimed transmitter coupling element and conductor element, which do not contact each other.

Claim 22 has been added to even further distinguish the invention from the prior art. Support for the changes can be found by referring to the translated specification at page 7, line 1 through page 8, line 2 and to Fig. 1. Additional support may be found by referring to the translated specification at page 12, line 24 through page 13, line 2 and at page 7, line 20 through page 8, line 2, and also to Fig. 3. Note the coupling capacitances C_B shown in Fig. 1 and the coupling capacitances C_{B1-4} shown in Fig. 3 that couple a current to the conductive floor/ground.

Claim 22 includes the following limitations: the ground is a ground surface supporting the tires of the motor vehicle; and said plurality of transmitters and said central receiver are capacitively coupled to the ground surface supporting the tires of the motor vehicle such that a closed circuit is formed by said plurality of transmitters, said central receiver, said infrastructure body, and the ground surface.

In Bankart et al., the wheel antenna 2 and the fixed antenna 3 are separated by an air gap and they are capacitively coupled together, forming one branch of a closed circuit. The other branch of the closed circuit is formed by the wheel bearing and other parts of the body of the vehicle (see column 12, lines 37-42). It should be clear that one path of the closed circuit in Bankart et al. is formed by the wheel antenna 2 and the fixed antenna 3, while the other path of the closed circuit in Bankart et al. is formed by the wheel bearing and other parts of the body of the vehicle.

Bankart et al. do not teach the limitations of claim 22. Nothing in Bankart et al. is capacitively coupled to the ground surface supporting the tires of the motor vehicle, and the ground surface supporting the tires of the motor vehicle in Bankart et al. does not form part of a closed circuit.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 11. Claim 11 is, therefore, believed to be patentable over the art. The dependent

claims are believed to be patentable as well because they all are ultimately dependent on claim 11.

In view of the foregoing, reconsideration and allowance of claims 11-18 and 22 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Please charge any fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stermer LLP, No. 12-1099.

Respectfully submitted,

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